

## RF Exposure Report

**Report No.:** SA180308C03

**FCC ID:** NKR-CB1GSKVM2

**Test Model:** UMC-SKVM2

**Received Date:** Mar. 08, 2018

**Date of Evaluation:** Jun. 15, 2018

**Issued Date:** Jun. 22, 2018

**Applicant:** Wistron Neweb Corporation

**Address:** 20 Park Avenue II (or Yuanchiu 2nd Rd), Hsinchu Science Park, Hsinchu  
308, Taiwan

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan,  
R.O.C.

**Test Location:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Vil, Kwei Shan Dist., Taoyuan City  
33383, Taiwan (R.O.C)

**FCC Registration /  
Designation Number:** 788550 / TW0003



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### Release Control Record

| Issue No.   | Description      | Date Issued   |
|-------------|------------------|---------------|
| SA180308C03 | Original Release | Jun. 22, 2018 |

## 1 Certificate of Conformity

**Product:** LTE CAT M1 communication board

**Brand:** WNC

**Test Model:** UMC-SKVM2

**Sample Status:** Identical Prototype

**Applicant:** Wistron Neweb Corporation

**Date of Evaluation:** Jun. 15, 2018

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :** Evonne Liu , **Date:** Jun. 22, 2018  
Evonne Liu / Specialist

**Approved by :** Dylan Chiou , **Date:** Jun. 22, 2018  
Dylan Chiou / Project Engineer

## 2 RF Exposure

### 2.1 Limits For Maximum Permissible Exposure (MPE)

| Frequency Range (MHz)                                 | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Average Time (minutes) |
|-------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| Limits For General Population / Uncontrolled Exposure |                               |                               |                                     |                        |
| 0.3-1.34                                              | 614                           | 1.63                          | (100)*                              | 30                     |
| 1.34-30                                               | 824/f                         | 2.19/f                        | (180/f <sup>2</sup> )*              | 30                     |
| 30-300                                                | 27.5                          | 0.073                         | 0.2                                 | 30                     |
| 300-1500                                              | ...                           | ...                           | f/1500                              | 30                     |
| 1500-100,000                                          | ...                           | ...                           | 1.0                                 | 30                     |

f = Frequency in MHz ; \*Plane-wave equivalent power density

### 2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

### 2.4 Calculation Result Of Maximum Conducted Power

| Band        | Mode | Max Power (dBm) | Antenna Gain (dBi) | Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|-------------|------|-----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| LTE Band 13 | A    | 25.7            | 2.74               | 20            | 0.139                               | 0.52                        |
|             | B    | 25.7            | 1.66               | 20            | 0.108                               | 0.52                        |
| Zigbee      | -    | 20              | 4                  | 20            | 0.050                               | 1.00                        |

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